

AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) A re-usable carrier structure for carrying an article, comprising
- a carrier base having at least a portion thereof transparent to electromagnetic radiation,
 - a surface of said carrier base having different surface properties from a surface of the article, and
 - said carrier base being stable to resist deformation by heat at temperatures less than or equal to about 80°C; and
 - a tacky adhesive layer disposed on said carrier base,
 - said adhesive layer being cross-linkable by electromagnetic radiation, by heat, or by both heat and electromagnetic radiation, for decreasing the adhesion thereof, and
 - said adhesive layer after being cross-linked having a different release profile from the surface of the article than from the surface of said carrier base, wherein the article may be removed leaving said adhesive layer adhering to said carrier base, and wherein said adhesive layer may be removed from said carrier base and said carrier base may be reused.
2. (Previously Presented) The re-usable carrier structure of claim 1, wherein the carrier base includes a waffle pack, a tray, a JEDEC tray, a tape-and-reel, or a tape.
3. (Original) The re-usable carrier structure of claim 1, wherein the electromagnetic radiation is applied to said adhesive layer through the portion of said carrier base that is transparent to electromagnetic radiation.
4. (Previously Presented) The re-usable carrier structure of claim 1, wherein the adhesive layer is cross-linkable by heat, by UV radiation, or by both heat and UV radiation.

5. (Original) The re-usable carrier structure of claim 1, wherein the adhesive layer loses the majority of its peel strength after cross-linking.
6. (Original) The re-usable carrier structure of claim 1, wherein the adhesive layer loses about 70% of its peel strength after cross-linking.
7. (Original) The re-usable carrier structure of claim 1, wherein said carrier base is stable to resist deformation by heat at temperatures less than or equal to about 150°C.
8. (Original) The re-usable carrier structure of claim 1, wherein said carrier base is stable to resist deformation by heat at temperatures less than or equal to about 300°C.
9. (Original) The re-usable carrier structure of claim 1,
further comprising a carrier frame,
wherein said carrier base is releasably supported by the carrier frame.
10. (Currently Amended) A re-usable carrier structure comprising:
a carrier base, said carrier base having at least a portion thereof transparent to electromagnetic radiation, and
said carrier base being stable to resist deformation by heat at temperatures less than or equal to about 80°C; and
an adhesive laminate disposed on a surface of said carrier base, said adhesive laminate comprising:
an adhesive base;
a first adhesive layer disposed on a first surface of said adhesive base for removably connecting said carrier base and said adhesive base; and
a second adhesive layer disposed on a second surface of said adhesive base for providing a tacky carrier surface,
said second adhesive layer being cross-linkable by electromagnetic radiation,

by heat, or by both heat and electromagnetic radiation, for decreasing the tackiness thereof,

wherein an article carried on the carrier surface is released when said second adhesive layer is cross-linked by electromagnetic radiation applied through the transparent portion of the carrier base, by heat, or by both heat and electromagnetic radiation, leaving said adhesive laminate on said carrier base, and wherein said adhesive laminate may be removed from said carrier base and said carrier base may be reused.

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11. (Previously Presented) The re-usable carrier structure of claim 10, wherein the carrier base includes a waffle pack, a tray, a JEDEC tray, a tape-and-reel, or a tape.
 12. (Original) The re-usable carrier structure of claim 10, wherein the electromagnetic radiation is applied to said adhesive layer through the portion of said carrier base that is transparent to electromagnetic radiation.
 13. (Previously Presented) The re-usable carrier structure of claim 10, wherein the second adhesive layer is cross-linkable by heat, by UV radiation, or by both heat and UV radiation.
 14. (Original) The re-usable carrier structure of claim 1, wherein the second adhesive layer loses the majority of its peel strength after cross-linking.
 15. (Original) The re-usable carrier structure of claim 10, wherein the second adhesive layer loses about 70% of its peel strength after cross-linking.
 16. (Original) The re-usable carrier structure of claim 10, wherein said carrier base is stable to resist deformation by heat at temperatures less than or equal to about 150°C.

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17. (Original) The re-usable carrier structure of claim 10, wherein said carrier base is stable to resist deformation by heat at temperatures less than or equal to about 300°C.
18. (Original) The re-usable carrier structure of claim 10, further comprising an adhesive base disposed between said first and said second adhesive layers, said adhesive base being stable to degradation at temperatures less than or equal to about 80°C.
19. (Original) The re-usable carrier structure of claim 10,
further comprising a carrier frame,
wherein said carrier base is releasably supported by the carrier frame.
20. (Currently Amended) A re-usable carrier structure comprising
a carrier base having at least a portion thereof transparent to electromagnetic radiation, and
said carrier base being stable to resist deformation by heat at temperatures less than or equal to about 80°C;
a first adhesive layer removably disposed on a surface of said carrier base; and
a second adhesive layer disposed on said first adhesive layer for providing a tacky carrier surface, and
said second adhesive layer being cross-linkable by electromagnetic radiation, by heat, or by both heat and electromagnetic radiation, for decreasing the tackiness thereof,
wherein an article carried on the carrier surface is released when said second adhesive layer is cross-linked by electromagnetic radiation applied through the transparent portion of the carrier base, by heat, or by both heat and electromagnetic radiation, leaving the first and second adhesive layers on said carrier base, and
wherein said first and second adhesive layers may be removed from said carrier base and said carrier base may be reused.

21. (Previously Presented) The re-usable carrier structure of claim 20, wherein the carrier base includes a waffle pack, a tray, a JEDEC tray, a tape-and-reel, or a tape.
22. (Original) The re-usable carrier structure of claim 20, wherein the electromagnetic radiation is applied to said adhesive layer through the portion of said carrier base that is transparent to electromagnetic radiation.
23. (Previously Presented) The re-usable carrier structure of claim 20, wherein the second adhesive layer is cross-linkable by heat, by UV radiation, or by both heat and UV radiation.
24. (Original) The re-usable carrier structure of claim 20, wherein the second adhesive layer loses the majority of its peel strength after cross-linking.
25. (Original) The re-usable carrier structure of claim 20, wherein the second adhesive layer loses about 70% of its peel strength after cross-linking.
26. (Original) The re-usable carrier structure of claim 20, wherein said carrier base is stable to resist deformation by heat at temperatures less than or equal to about 150°C.
27. (Original) The re-usable carrier structure of claim 20, wherein said carrier base is stable to resist deformation by heat at temperatures less than or equal to about 300°C.
28. (Original) The re-usable carrier structure of claim 20, further comprising an adhesive liner disposed between said first and said second adhesive layers, said adhesive liner being stable to thermal degradation at temperatures less than or equal to about 80°C.
29. (Original) The re-usable carrier structure of claim 20 further comprising:
a carrier frame,

wherein said carrier base is releasably supported by the carrier frame.

30. (Currently Amended) A re-usable carrier structure for carrying one or more objects, said re-usable carrier comprising:

a base layer,

wherein at least a portion of said base layer is transparent to electromagnetic radiation,

wherein said base layer is formed of a material that is stable at temperatures less than about 80°C; and

an adhesive layer disposed on said base layer for adhesively holding one or more objects,

wherein said adhesive layer becomes cross-linked upon exposure to electromagnetic radiation applied through the transparent portion of the base layer thereby to exhibit a reduction of adhesiveness,

wherein the reduction of adhesiveness to the one or more objects exceeds the reduction of adhesiveness to said base layer,

~~whereby~~ wherein one or more objects carried on said adhesive layer are released when said adhesive layer is cross-linked by exposure to electromagnetic radiation applied through the transparent portion of the base layer, and said adhesive layer may be removed from said base layer and said base layer may be reused.

31. (Original) The re-usable carrier of claim 30 further comprising:

a carrier structure,

wherein said base layer is releasably supported by said carrier structure.

32. (Original) The re-usable carrier of claim 31, wherein said carrier structure is formed of a material that is stable at temperatures less than about 80°C.

33. (Original) The re-usable carrier of claim 30,

wherein said adhesive layer comprises first and second adhesive layers exhibiting different adhesiveness,

wherein said first adhesive layer is disposed on said base layer, and

wherein said second adhesive layer is disposed on said first adhesive layer and exhibits greater reduction of adhesiveness than said first adhesive layer.

34. (Original) The re-usable carrier of claim 33, further comprising a liner layer disposed between said first and second adhesive layers.

35. (Currently Amended) A re-usable carrier for releasably carrying one or more objects, said re-usable carrier comprising:

a carrier structure having a support member and adapted for receiving a cover;

a carrier base disposed on the support member of said carrier structure,

wherein at least a portion of said carrier base is transparent to ultraviolet radiation, and wherein said carrier base is formed of a material that is stable at temperatures less than about 80°C; and

a cross-linkable tacky adhesive layer disposed on said carrier base for adhesively holding one or more objects, wherein said adhesive layer becomes cross-linked upon exposure to ultraviolet radiation applied through the transparent portion of said carrier base layer thereby to exhibit a reduction of adhesiveness, wherein the reduction of adhesiveness to the one or more objects is more than about 70% and exceeds the reduction of adhesiveness to said carrier base, and

a cover disposed on said carrier structure, wherein said cover is of a material opaque to ultraviolet radiation for blocking ultraviolet radiation from cross-linking said cross-linkable tacky adhesive layer,

~~whereby~~ wherein one or more objects carried on said adhesive layer are released when said cover is removed and said adhesive layer is cross-linked by exposure to ultraviolet radiation applied through the transparent portion of the carrier base, and said adhesive layer may be removed from said carrier base and said carrier

base may be reused.

36. (Currently Amended) ~~The re-usable carrier of claim 35~~ A re-usable carrier for releasably carrying one or more objects, said re-usable carrier comprising:

a carrier structure having a support member and adapted for receiving a cover;

a carrier base disposed on the support member of said carrier structure,

wherein at least a portion of said carrier base is transparent to ultraviolet radiation,

and wherein said carrier base is formed of a material that is stable at temperatures less than about 80°C; and

a cross-linkable tacky adhesive layer disposed on said carrier base for adhesively holding one or more objects, wherein said adhesive layer becomes cross-linked upon exposure to ultraviolet radiation applied through the transparent portion of said carrier base layer thereby to exhibit a reduction of adhesiveness, wherein the reduction of adhesiveness to the one or more objects is more than about 70% and exceeds the reduction of adhesiveness to said carrier base, and

a cover disposed on said carrier structure, wherein said cover is of a material opaque to ultraviolet radiation for blocking ultraviolet radiation from cross-linking said cross-linkable tacky adhesive layer,

wherein said carrier structure includes a rectangular frame having a ledge providing the support member, and wherein said cover includes first and second covers disposed on opposite ends of said rectangular frame, wherein said first and second covers and said rectangular frame enclose said carrier base,

whereby one or more objects carried on said adhesive layer are released when said cover is removed and said adhesive layer is cross-linked by exposure to ultraviolet radiation applied through the transparent portion of the carrier base.